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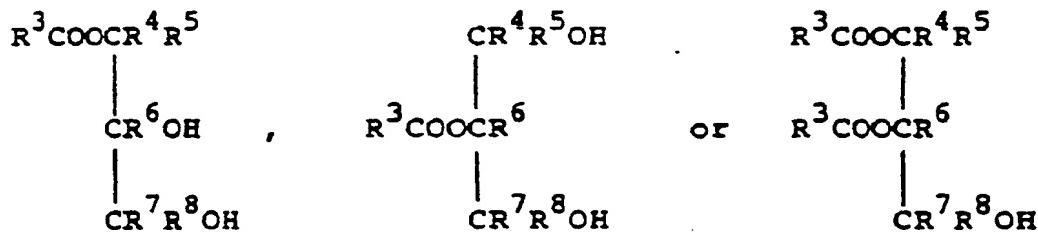
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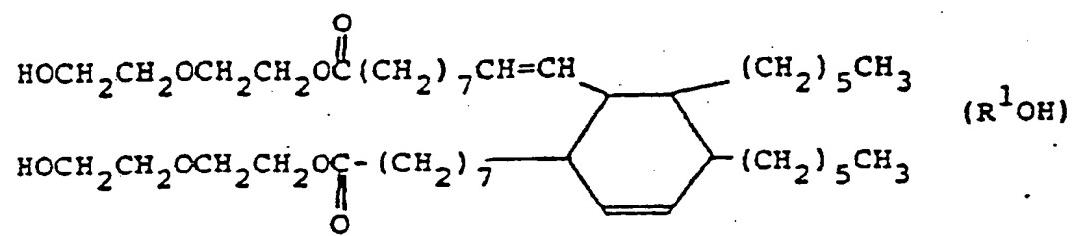
(54) Dithiophosphates.

(57) Metal dithiophosphates obtainable by reacting a basic zinc or copper compound or a molybdenum compound with a dithiophosphoric acid, said dithiophosphoric acid being obtainable by reacting phosphorus pentasulphide with a mixture of alcohols ROH and R'(OH)_m where m is 1 or 2, the group R is an aliphatic hydrogen- and carbon-containing group having at least 4 carbon atoms, e.g. a C₄ to C₁₀ alkyl group, or is an alkaryl group, R' is a hydrogen- and carbon-containing group containing at least 12 carbon atoms and either (a) a > C = N group or (b) the group -(C_nH_{2n-p}R_pO)_q-, R² being an alkyl group, n being an integer of from 2 to 5, p being zero or an integer of from 1 to 5 and q being an integer of 2 or more or R'(OH)_m is a glyceryl derivative having the formula



where R³ is an aliphatic hydrogen- and carbon-containing group containing at least 9 carbon atoms and R⁴, R⁵, R⁶ and R⁷ are hydrogen or alkyl groups. Preferred is the zinc dithiophosphate derived from 2-ethyl hexanol (ROH) and

EP 0 322 235 A3





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EUROPEAN SEARCH REPORT

Application Number

EP 88 31 2163

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	SOVIET INVENTIONS ILLUSTRATED, week C24, 23rd July 1980, section CH: Chemical, abstract no. 42806C/24, Derwent Publications Ltd, London, GB; & SU-A-682 526 (MOSCOW GUBKIN PETROCHEM.) 30-10-1979 * Abstract * ---	1,11,14	C 07 F 9/165 C 07 F 9/65 C 10 M 137/10 // C 10 N 10:02 C 10 N 10:04 C 10 N 10:12 C 10 N 30:06 C 10 N 30:10 C 10 N 30:12
Y	US-A-3 726 798 (H.B. SILVER) * Whole document *	1,10,11	
Y	EP-A-0 054 804 (BAYER) * Whole document *	1,5,6, 11	
Y	SOVIET INVENTIONS ILLUSTRATED, week 8811, 27th April 1988, section CH: Chemical, abstract no. 88-075937/11, Derwent Publications Ltd, London, GB; & SU-A-1327 972 (LENINGRAD PLEKHANOV MINE) 07-08-1987 * Abstract * ---	1,5	
Y	FR-A-2 342 334 (CHEVRON RESEARCH CO.) * Claims *	1,11-14	TECHNICAL FIELDS SEARCHED (Int. Cl.4) C 07 F 9/00
Y	US-A-4 255 271 (A.G. HORODYSKY) * Compound I, columns 1-2; example 1 *	1,3,4, 11,14	
Y	US-A-2 680 123 (P.K. MULVANY) * Examples 1,2; claims *	1,11,14	
P,X	US-A-4 778 906 (D. LOVE) * Whole document *	1,11	
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		01-12-1989	OUSSET J-B.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

